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ABSTRACT

This prospectus for an accounting course is one of a series of business education position papers/curriculum guides developed for high schools in Connecticut to demonstrate that business courses can be used as part of an integrated academic and vocational curriculum. The guide is organized into the following six sections: (1) business department philosophy; (2) course philosophy for accounting; (3) mathematics standards included in accounting; (4) 4 course goals; (5) 12 student outcomes or competencies; (5) 19 methods of assessment of student outcomes; and (6) a list of 5 references to books and computer software used to prepare the guide. (KC)

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CROSS ACADEMIC CREDIT ACCOUNTING

FINAL REPORT

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PREPARED FOR

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DIVISION OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION
BUREAU OF VOCATIONAL SERVICES
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DEPARTMENT PHILOSOPHY

The Business Education program, an integral part of a comprehensive secondary school curriculum, is designed to encompass life application skills: basic business, economic, and business administration education; college preparation; and vocational preparation. A business curriculum is for students who are preparing to enter the work force after graduation, a four-year college/university, or a two-year college/technical school. Course offerings focus on instruction in economic education, initial job preparation, and all areas of communication--reading, writing, speaking, listening, and computing. Computer education should be an integral part of the program, and computer applications should be integrated into all courses.

Therefore, **WE BELIEVE THAT BUSINESS EDUCATION--**

1. Has a responsibility to help all high school students to develop business, economic, and computer literacy.

2. Must provide needed leadership experiences through its student organizations.

3. Must provide occupational preparation for those students who will enter the work force upon completing high school.

4. Provides courses which should be accepted as meeting specific general education high school graduation requirements.

5. Provides courses which should be recognized as appropriate private electives for college-bound students and should be accepted by colleges and universities as meeting part of their entrance requirements.

COURSE PHILOSOPHY

Accounting will give high school students the skills, knowledge, and attitudes basic to successful participation in today's business world.

Accounting I is designed to present the introductory concepts of double-entry accounting and the accounting cycle as applied to service and merchandising businesses organized as single proprietorships. This course provides an excellent opportunity for students to become aware of employment possibilities in the accounting and recordkeeping field, to develop good work habits, and to foster a sense of responsibility and accuracy in work assignments.

Accounting will give adequate attention to both skill development and the application of data processing skills in a bookkeeping/accounting context. Emphasis should be placed on principles first and computer applications second. Students should be able to carry out their computations and other processes in accounting without the use of sophisticated electronic machines. The fundamentals of accounting must continue to be the basis of beginning accounting instruction. There can be no shortcuts to learning accounting concepts and procedures. The accounting equation provides the foundation for this understanding. The ability to analyze transactions to the equation is critical to success in further accounting studies and in accounting jobs.

During the first semester, computers should be introduced as a tool to reinforce and remediate learning. Tutorial programs that review the accounting cycle and offer assistance with vocabulary and concepts are available from a variety of sources. Accounting will develop an instructional pattern which recognizes the realities of the contemporary accounting scene, and, at the same time give the students the understandings and skills that will help them to survive in the business world with a minimal inventory of those sophisticated machines.

During the second semester, a variety of computerized problems or projects can be used to reinforce the merchandising business accounting cycle and give the students experience with the basic functions of an electronic spreadsheet.

Mathematics Standards Included in Accounting

In 1986, the Board of Directors of the National Council of Teachers of mathematics established the Commission on Standards for School mathematics as one means to help improve the quality of school mathematics. Their product was a set of standards for mathematics curricula in North American schools (K-12).

Of the fourteen total standards established for grades 9-12, the following ones relate directly to the accounting curriculum:

STANDARD 1: MATHEMATICS AND ACCOUNTING AS PROBLEM SOLVING
In grades 9-12, the mathematics curriculum should include the refinement and extension of methods of mathematical problem solving so that all students can:

- o use, with increasing confidence, problem-solving approaches to investigate and understand mathematical content;
- o apply integrated mathematical problem-solving strategies to solve problems from within and outside mathematics;
- o recognize and formulate problems from situations within and outside mathematics;
- o apply the process of mathematical modeling to real-world problem situations.

STANDARD 2: MATHEMATICS AND ACCOUNTING AS COMMUNICATION
In grades 9-12, the mathematics curriculum should include the continued development of language and symbolism to communicate mathematical ideas so that all students can:

- o reflect upon and clarify their thinking about mathematical ideas and relationships;
- o formulate mathematical definitions and express generalizations discovered through investigation;
- o express mathematical ideas orally and in writing;
- o read written presentations of mathematics with understanding;
- o ask clarifying and extending questions related to mathematics they have read or heard about;
- o appreciate the economy, power, and elegance of mathematical notation and its role in the development of mathematical ideas.

STANDARD 3: MATHEMATICS AND ACCOUNTING AS REASONING
In grades 9-12, the mathematics curriculum should include numerous and varied experiences that reinforce and extend logical reasoning skills so that all students can:

- o make and test conjectures;
- o formulate counterexamples;
- o follow logical arguments;
- o judge the validity of arguments;
- o construct simple valid arguments;

STANDARD 4: MATHEMATICAL AND ACCOUNTING CONNECTIONS
In grades 9-12, the mathematics curriculum should include investigation of the connections and interplay among various mathematical topics and their applications so that all students can:

- o recognize equivalent representations of the same concept;
- o relate procedures in one representation of procedures in an equivalent representation;
- o use and value the connections among mathematical topics;
- o use and value the connections between mathematics and other disciplines.

STANDARD 10: STATISTICS
In grades 9-12, the mathematics curriculum should include the continued study of data analysis and statistics so that all students can:

- o construct and draw inferences from charts, tables, and graphs that summarize data from real-world situations;
- o use curve fitting to predict from data;

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COURSE GOALS

The course goals are as follows:

1. Recognize accounting as it relates to careers,
2. Become familiar with accounting terminology,
3. Understand accounting concepts, principles, and practices, and
4. Apply accounting procedures to business simulations.

Learning outcomes that demonstrate knowledge involve recall of previously learned subject matter; learning outcomes that demonstrate understanding involve the ability to interpret subject matter; and learning outcomes that demonstrate application involve the ability to use learned material in realistic situations.

STUDENT COMPETENCIES

The student will be able to:

1. classify accounts as they relate to the fundamental accounting equation and indicate account balances.
2. apply the concept of debit/credit to accounting transactions and indicate increase/decrease of accounts affected by given transactions.
3. record correctly in the appropriate journals from source documents or a list of transactions.
4. post correctly to ledger accounts from the journals.
5. complete a worksheet with adjustments from the ledger.
6. prepare a financial statement from the worksheet.
7. record the necessary adjusting and closing entries and complete such other closing procedures as are required.
8. successfully operate a checking account and complete related forms.
9. understand the effect of data processing on accounting records and procedures.
10. prepare payroll records.
11. complete a practice set, with source documents, covering the complete accounting cycle.
12. identify career opportunities in the field of accounting and related areas.

PERFORMANCE OUTCOMES/ASSESSMENT METHODOLOGY

Students will be able:

1. Given an assignment to define the purpose of accounting, list ten values or uses of accounting records with at least 90 percent accuracy.

2. Given five case problems dealing with a question of ethics in accounting, specify the ethical procedure that an accountant should follow in each case.

3. Given an assignment to describe the systems used for locating and eliminating common errors in accounting records, describe orally, or in writing, how these errors may be detected with complete accuracy.

4. Given a list of the five types of accounts, indicate how the five types of accounts can be increased or decreased with 100 percent accuracy.

5. Given 20 simple cash transactions, correctly enter them into the correct expense accounts with 100 percent accuracy.

6. Given a chart of account and ten transactions involving cash receipts and cash payments, select and list the accounts that would be affected by these transactions with at least 95 percent accuracy.

7. Given at least ten "T" accounts with both debit and credit entries, determine the balance of each account and list the titles and balances with at least 95 percent accuracy.

8. Given at least 20 "T" accounts complete with titles and balances, select the accounts that would appear on a balance sheet and those that would appear on an income statement with no more than one account incorrectly identified.

9. Given a list of 20 business transactions, identify which of the business transactions would be entered in each of the following journals: general, cash receipts, cash payments, accounts receivable, and accounts payable, with complete accuracy.

10. Given a completed combination journal, post the transactions to "T" accounts with 100 percent accuracy.

11. Given a set of ledgers with at least 25 "T" accounts complete with titles and balances, construct a trial balance with complete accuracy.

12. Given an 8-column worksheet with a trial balance, make the necessary end-of-fiscal period adjustments and extend balances into the appropriate columns with complete accuracy and with each section correctly ruled and balanced.

13. Given an assignment to compare manual accounting procedures to accounting on a microcomputer, point out where each might justifiably be used accurately.

14. Given the ten steps of an expanded accounting cycle, explain what occurs in each of the ten steps of the accounting cycle completely and accurately.

15. Given a set of 20 source documents including purchase for cash and on account, sales for cash and on account, payments, purchases, and other appropriate source documents as well as a chart of account, analyze each document and determine the accounts to debit and credit for each transaction with at least 95 percent accuracy,

16. Given a completed journal, post all necessary transactions to correct ledger accounts with complete accuracy.

17. Given a list of 20 business transactions and a chart of accounts for a service business, indicate the accounts to debit and credit for each transaction, refer to the data on a worksheet and prepare required adjusting and closing entries in a general journal with at least 95 percent accuracy.

18. Given a completed 8-column worksheet, extract the required data and prepare a balance sheet and income statement with complete accuracy.

19. Given a set of accounts at the end of the month and after the adjusting and closing entries have been posted, prepare a post-closing trial balance with complete accuracy.

MATERIALS USED

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